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|--|-------------|----------------------|------------------------------|------------------|
| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
| 10/743,343   | 12/23/2003  | Samir Raiyani        | 13909-137001 /<br>2003P00366 | 4701             |
| 32864  | 7590        | 07/21/2009           | EXAMINER                     |                  |
| FISH & RICHARDSON, P.C.<br>PO BOX 1022<br>MINNEAPOLIS, MN 55440-1022 |             |                      | AMSDELL, DANA                |                  |
|  |             | ART UNIT             | PAPER NUMBER                 |                  |
|  |             | 3627                 |                              |                  |
|  |             | NOTIFICATION DATE    |                              | DELIVERY MODE    |
|  |             | 07/21/2009           |                              | ELECTRONIC       |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

|                              |                                      |                                       |
|------------------------------|--------------------------------------|---------------------------------------|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/743,343 | <b>Applicant(s)</b><br>RAIYANI ET AL. |
|                              | <b>Examiner</b><br>DANA AMSDELL      | <b>Art Unit</b><br>3627               |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 04 May 2009.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 58-64, 68-77 and 81-96 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 58-64, 68-77 and 81-96 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 0/15/2009

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Remarks***

1. Examiner acknowledges cancellation of claims 65-67, 78-80, and 81- 90 and amendments to independent claims 58, 71, and 84 for the purpose of continued examination.

Applicant's remarks regarding Bergman teaching an arena venue, thus not anticipating a warehouse environment, have been fully considered but they are not persuasive. In light of the Specifications, Examiner interprets 'warehouse environment' to be any venue that holds an inventory; and employs "worker[s] who often use their hands to perform tasks" (page 2, line 1). Claims 58, 71 and 84 as amended will be examined on their merit in the immediate action.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 58-64, 68-77, and 81-96 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergman et al. (US 7174308), herein "Bergman".

4. Regarding claims 58, 71 and 84 are directed to multimodal warehouse applications, Bergman teaches:

- one or more computers; and
- a computer-readable medium coupled to the one or more computers having instructions stored therein (Fig. 7); which, when executed by the one or more computers, cause the one or more computers to perform operations comprising:
  - providing a multi-modal user interface on a mobile device (Fig. 1, elm. 36), the multi-modal interface for performing inventory management tasks (column 5, lines 25-32) in an environment that holds an inventory (Fig. 5, elm. 100/102) and employs workers who often use their hands to perform tasks, henceforth 'warehouse' (Fig. 1, elms. 32/ 34), and the multi-modal interface enabling output and user input of information using both first and second modalities that collectively include a voice-based modality and a touch-based modality (Fig. 1, elms 20/22/24);
    - receiving a first user input identifying a job type mode (column 5, lines 8-10 –order), the first user input being input using either the first modality or the second modality as chosen by a user of the mobile device, and the job type mode being selected from among a stocking mode in which the user enters one or more items into a dispenser, henceforth 'bin', in the warehouse environment a picking mode in which the user removes the one or more items from the bin in the warehouse environment, and a counting mode in which the user counts the one or more items in the bin in the warehouse environment (column 6, lines 18-

18),

transmitting information identifying the user-selected job type mode to an inventory management system a server, in a format consistent with the modality in which the first user input was received (column 4, lines 5-15),

responsive to transmitting the information, receiving a response to the information identifying the user-selected job type mode from the inventory management system (Fig. 3, block 84; and column 4, lines 34-44), in formats consistent with both the first modality and the second modality (column 6, lines 44-53), the response identifying a location at which the user will perform a function related to the user-selected job type mode on the one or more items, a description of the one or more items, and a best 'zone' (henceforth 'route') from a present location of the user to the bin an item (column 4, lines 41-50; and Fig. 10-Zone; and column 9, lines 29-34),

providing the response to the user using both audio and display components of the multi-modal user interface, in the formats consistent with both the first modality and the second modality (column 7, lines 30-50),

receiving a second user input using either the first modality or the second modality as chosen by the user, the second user input indicating that the user has completed the selected function, and including count information or location information associated with the one or more items as observed by the user and, when the voice-based modality is used, a phonetically distinct checkword associated with the bin to indicate completion of the selected function (column 4,

lines 34-67-wherein end of order flag or indicator is a checkword in voice-based modality, henceforth checkword),

updating inventory data for the one or more items item based on the count information or the location information, the updated inventory data being accessible using the formats consistent with both the first modality and the second modality (column 5, lines 7-15), and

transmitting information indicating that the user has completed the selected function related to the user-selected job type mode to the inventory management, in a format consistent with the modality in which the second user input was received (column 4, lines 36-67; and column 5, lines 6-7)

5. Regarding claims 59, 72 and 85, Bergman teaches wherein the operations further comprise:

outputting the updated inventory data in a format consistent with either the first modality or the second modality, such that the inventory data is maintained during performance of the inventory management tasks (Fig. 5, elm. 102; and column 5, lines 28-41).

6. Regarding claims 60, 73 and 86, Bergman teaches wherein the job type mode comprises job data (Fig. 3, elm. 80-wherein an order is representative of a job' and order content represents job data).

7. Regarding claims 61, 74 and 87, Bergman teaches wherein the multi-modal interface further enables output and user input information using first modality and the second modality collectively include two or more of a voice modality, a Radio Frequency Identification Device (RFID) modality, or a bar code modality (Fig. 7, elms. 151/152/153; and column 7, lines 30-50),
8. Regarding claims 62-63, 75-76 and 88-89, Bergman teaches wherein the operations further comprise receiving a pick list identifying the one or more items and the function; and further displaying the pick list using a visual user interface, and outputting, using voice synthesis, information identifying less than all items on the pick list (column4, lines 16-33).
9. Regarding claims 64, 77 and 90, Bergman teaches wherein the formats consistent with both the first modality and the second modality comprise HTML and VXML, respectively Fig. 7, elms. 151/152; and column 7, lines 12-42).
10. Regarding claims 68, 81 and 94, Bergman teaches further: determining, based on updating the inventory data, that the bin associated with the item is expected to be empty; prompting the user to confirm whether the bin is actually empty, using both the first modality and the second modality (Fig. 1, elms. 34/36; and column 5, lines 25-61).

11. Regarding claims 69-70, 82-83 and 95-96, Bergman teaches wherein the first user input is received using a different modality than the second user input; wherein: the first user input is received using the voice-based modality, and the second user input is received using the touch-based modality (column 7, lines 43-51; and column 8, lines 1--2).

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

|                    |                   |
|--------------------|-------------------|
| Peterson et al.    | (US 7039166)      |
| Barnes, Jr.        | (US 7487112)      |
| Nagai et al.       | (US 6636587)      |
| Sravanapudi et al. | (US 2001/0049603) |
| Bondarenko et al.  | (US 2004/0083479) |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANA AMSDELL whose telephone number is (571)270-5210. The examiner can normally be reached on 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. Ryan Zeender/  
Supervisory Patent Examiner, Art Unit 3627